

nection with statements concerning the growth of notches of leaves attached to plants. It would seem, therefore, that the conclusions reached by LOEB are not substantiated by the behavior of the plants in question.—E. LUCY BRAUN, *University of Cincinnati*.

MISTLETOE VS. MISTLETOE

(WITH ONE FIGURE)

The specimen shown in fig. 1 was collected near Tucson about three years ago by Professor J. J. THORNER of this University. *Phoradendron flavescens*, the larger plant, acting both as partial parasite and host, is found on species of *Quercus*, *Fraxinus*, and *Juglans*; while *P. californicum*, the smaller one, is a common parasite on *Parkinsonia*, *Prosopis*, and *Acacia*. Although the mistletoe is of common occurrence on palo verde and mesquite in this region, the writer has never before seen one species parasitic on another. It is interesting to consider water and salts, and possibly other materials, as having to pass successively through the vascular systems of three different plants before they reach the cells wherein they enter into metabolic activities.



FIG. 1.—*Phoradendron californicum* parasitic on *P. flavescens*.

With transpiration much stronger in *P. flavescens* because of its larger transpiring surface, it would appear as if the second species must have a rather difficult time in securing a sustaining share of the ascending stream of sap. Possibly physiologists could find a higher osmotic pressure in the smaller species to account for its ability to maintain an existence in its peculiar location.—J. G. BROWN, *University of Arizona*.